

CLAIMS

1. A high-throughput assay device comprising:  
a. hollow tube having sidewalls defining an inner cavity, said inner  
cavity for passing a first flowable fluid therethrough;  
5 open ends; and  
an opening extending through a sidewall, said opening for mounting  
a membrane thereon.
2. A method of identifying a compound that alters membrane  
traffic comprising:  
10 providing a high-throughput assay device comprising:  
a hollow tube having sidewalls defining an inner cavity, said  
inner cavity for passing a first flowable fluid therethrough;  
open ends; and  
an opening extending through a sidewall, said opening for  
15 mounting a membrane thereon;  
mounting a membrane patch onto the opening;  
flowing a first flowable fluid containing a test compound through the  
inner cavity;  
flowing a second flowable fluid over an outer surface of the device;  
20 and  
determining whether the test compound increases or decreases  
traffic across the membrane patch.
3. A membrane traffic modulator isolated according to the  
method of claim 2.
- 25 4. A method of identifying a compound that alters membrane  
traffic comprising:  
providing a high-throughput assay device comprising:  
a hollow tube having sidewalls defining an inner cavity, said  
inner cavity for passing a first flowable fluid therethrough;  
30 open ends; and  
an opening extending through a sidewall, said opening for  
mounting a membrane thereon;  
mounting a membrane patch onto the opening;

- flowing a first flowable fluid through the inner cavity;
  - flowing a second flowable fluid containing a test compound over an outer surface of the device; and
  - determining whether the test compound increases or decreases
- 5 traffic across the membrane patch.
5. A membrane traffic modulator isolated according to the method of claim 4.